

CLIMATOLOGICAL DATA FOR JULY, 1911.

DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Unseasonably warm weather prevailed throughout the district during the first decade, except that it was cool over the southern portion from the 7th to the 10th. From the 11th to the close of the month moderate temperatures prevailed generally, except that on the 26th, 30th, and 31st maximum temperatures were much above the normal over the Colorado and New Mexico areas.

Periods of precipitation were not well defined. In the Colorado area there were two periods of showers, 1st to the 8th, and 11th to the 31st, although there was scattered precipitation on every day during the month. In the New Mexico area there were four periods of precipitation, 1st to the 7th, 10th to the 14th, 18th to the 21st, 27th to the 29th, and scattered showers occurred in some part of the area every day. In the Texas area there was no period of general precipitation, but scattered light showers occurred every day, except on the 1st. In Oklahoma, Arkansas, and the Kansas, Missouri, and Tennessee areas, speaking broadly, there were two periods of precipitation, 6th to the 23d, and 27th to the 31st. Light showers occurred on other dates, but no rain fell in the Kansas area on the 25th and 26th, in the Missouri area on the 2d, 3d, and 25th to the 27th, and in the Tennessee area on the 1st to the 3d, 18th to the 19th, and 25th to the 27th, and in Arkansas on the 4th and 26th to the 27th. In Louisiana and the Mississippi area showers occurred daily from the 1st to the 25th, again on the 30th to the 31st, and light showers occurred on other days, but no rain fell on the 26th to the 28th in the Mississippi area and on the 27th in Louisiana. Taken as a whole the precipitation was well distributed and sufficient for agricultural needs, but at times in the southern portion of the district excessive rains interfered materially with outdoor work.

TEMPERATURE.

Mean temperatures for the month were below the normal in all parts of the district, the departures ranging from -0.2° to -4.6° , except that at a few stations in the eastern portion of the Colorado area, the central portion of Oklahoma, and the south-central portion of the Kansas area there was a slight excess. The greatest deficiency in mean temperature occurred in the southwestern portion of the New Mexico area and the northern portion of the Mississippi area. The warmest weather occurred generally about the middle of the first decade, and the maximum temperatures were above 100° at nearly all stations except in the Colorado and New Mexico areas and in Louisiana, where they were above 95° . In the Kansas and Texas areas and in Oklahoma the highest

readings ranged from 105° to 109° in most localities. The highest temperature for the district, 111° , occurred at La Crosse, Kans., and maximum temperatures of 110° were recorded at Burlington, Kans., and Frederick, Okla. These excessively high temperatures were accompanied by hot winds, which were very injurious to vegetation. The monthly minimum temperatures occurred generally about the middle of the last decade. The lowest readings were generally below 55° in the Colorado and New Mexico areas, and below 40° in some of the more elevated localities. Over the remainder of the district monthly minimum temperatures ranged from 50° to 60° , except that in the southern portion the lowest readings were generally between 60° and 70° . The lowest temperature recorded during the month was 33° at Elizabethtown, N. Mex. A minimum temperature of 34° was recorded at Lake Moraine, Colo. Taken as a whole temperature conditions during the month were mostly moderate and favorable to agricultural interests, except that some localities suffered from hot winds.

Monthly mean temperatures and departures from the normal for the various States and areas are reported as follows: Colorado area, 66.2° , -0.9° ; New Mexico area, 70.8° , -1.6° ; Texas area, 79.2° , -0.2° ; Kansas area, 78.8° , $+0.6^{\circ}$; Oklahoma, 80.7° , $+0.3^{\circ}$; Missouri area, 76.6° , $+0.8^{\circ}$; Tennessee area, 78.0° , -1.3° ; Arkansas, 78.4° , -1.8° ; Mississippi area, 78.5° , -2.0° ; Louisiana, 80.0° , -1.5° .

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Heavy precipitation occurred over the greater portion of this drainage area. Over the headwaters of the Arkansas River in Colorado, the average precipitation from 35 stations was 4.04 inches, about 0.9 inch above the normal. The average precipitation from 45 stations in those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma was 4.68 inches, about 1.1 inches above the normal. The average from 20 stations in the Cimarron Valley was 4.55 inches, about 1.6 inches above the normal. The precipitation was uniformly distributed throughout the Canadian Valley, the amounts from 70 stations averaging 4.33 inches, about 0.8 inch above the normal. Unusually heavy precipitation occurred over the Verdigris and Neosho Valleys; the average from 10 stations in the Verdigris Valley was 7.74 inches, about 2.5 inches above the normal, and the average from 18 stations in the Neosho Valley was 6.71 inches, about 3 inches in excess of the normal. Over that part of the Arkansas Valley below the Oklahoma-Arkansas line the amounts from 15 stations averaged 4.64 inches, about 0.6 inch above the normal.

Red River and tributaries.—The precipitation was unevenly distributed over those portions of the Red River Valley that lie in New Mexico, Texas, and Oklahoma where the amounts from 47 stations averaged 4.81 inches, about 1 inch above the normal. Over those portions of this valley below the Texas-Arkansas line the precipitation was excessive in some localities, four stations in Louisiana reporting more than 10 inches. The average from 17 stations was 7.93 inches, about 3.2 inches in excess of the normal.

Mississippi River south of St. Louis and small tributaries.—The precipitation was unevenly distributed over this drainage area, being excessive in some localities and light in others. In the immediate Mississippi Valley the amounts from 43 stations averaged 5.05 inches, about 0.4 inch above the normal. Six stations reported more than 10 inches. Over the Valley of the Meramec the precipitation averaged about 2 inches below the normal. The average for 22 stations in the White River Valley was 5.63 inches, about 1.2 inches above the normal. The average for 30 stations in the Yazoo Valley was 4.61 inches, about 0.7 inch above the normal, and the average for the Valley of the Big Black was 5.40 inches, about 0.8 inch above the normal. The average precipitation from 18 stations in the Ouachita Valley was 5.09 inches, about half an inch above the normal.

Louisiana coastal plain.—Heavy precipitation occurred generally over this area, the average from 33 stations being 10.53 inches, about 3.7 inches above the normal. More than 10 inches occurred at 19 stations.

Monthly precipitation and departures from the normal for the various States and parts of States (in inches) are reported as follows: Colorado area, 3.92, +0.78; New Mexico area, 4.16, +1.42; Texas area, 3.91, +0.38; Kansas area, 4.93, +0.93; Oklahoma, 5.64, +2.04; Missouri area, 4.66, +0.13; Tennessee area, 3.87, +0.04; Arkansas, 4.83, -0.97; Mississippi area, 5.69, +1.85; Louisiana, 9.37, +3.10.

RIVERS.

Over the upper Arkansas River there was little change in stages, there being a slightly increased flow of water at the close of the month. The lower Arkansas River was at a low stage during the greater part of the month and was not navigable until after the 25th. At Little Rock a stage of -0.5 foot was recorded on the 18th, being the lowest of record for July.

In Oklahoma there was a decided rise in practically all streams. The rivers were falling at the close of the month, but on the whole were carrying more water than at any time since November, 1909. In some localities there were overflows, but no damaging floods occurred.

There was a rise in the upper Red River during the latter half of the month, reaching the lower stretches that lie in Arkansas and Louisiana during the last decade.

Low stages prevailed in the White River during the month. There were slight rises in the Ouachita during the latter half of the month, but low stages prevailed during the greater portion.

NOTES.

Oklahoma (J. Pemberton Slaughter, section director).—The rainfall was abundant over nearly the entire State. With one exception, this was the wettest July of record.

Missouri (George Reeder, section director).—The drought of the present year has been the most widespread and disastrous since that of 1901. Vegetation, however, has greatly revived since the recent rains. The excessive heat during the first part of the month interfered with the shipping of live stock and perishable products.

Arkansas (H. F. Alciatore, section director).—On the whole, the weather was favorable for agricultural interests.

TABLE 1.—Climatological data for July, 1911. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.			Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.			Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
					Highest.	Date.	Lowest.							Total.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.								
<i>Colorado.</i>																									
Blaine.....	Baca.....	3,935	19	76.7	+ 0.3	99	5	55	25	38	2.34	- 0.38	1.37	0	5	10	21	0	s.	M. M. Myers.					
Buena Vista.....	Chaffee.....	7,955	11	.....	.....	.....	.....	39	31	2.44	+ 1.15	0.60	0	17	24 ^a	5 ^a	1 ^a	sw.	C. A. Short.		
Calhan.....	El Paso.....	6,700	4	65.2	.....	84	29 ^f	47	97	31	2.81	0.73	0	12	7	17	2	n.	H. B. Rice.					
Canon City.....	Fremont.....	5,343	23	72.0	+ 1.3	93	10 ^f	54	97	38	1.87	+ 0.09	0.32	0	14	17	12	2	n.	G. C. Sherwood.					
Colorado Springs.....	El Paso.....	6,098	31	65.4	- 2.5	82	10 ^f	47	31	32	2.17	- 0.67	0.64	0	12	4	17	10	.....	Colorado College.				
Cripple Creek.....	Teller.....	9,398	10	E. G. Willis.				
Cuchara Camps.....	Huerfano.....	8,200	2	.....	.....	.....	.....	.....	.....	6.33	.....	2.62	0	13	6	10	15	sw.	George A. Mayes.	
Eads.....	Kiowa.....	4,209	4	.....	.....	.....	.....	.....	.....	4.56	.....	0.81	0	13	3	23	5	e.	W. H. Lauck.	
Fairview.....	Custer.....	9,500	2	.....	.....	.....	.....	.....	.....	4.56	.....	0.81	0	20	6	11	14	w.	Elizabeth L. Gray.	
Fremont Experiment Station.....	El Paso.....	8,850	1	54.9	74	18	39	9	32	5.42	U. S. Forest Service.				
Garfield.....	Chaffee.....	9,510	1	.....	.....	.....	.....	.....	.....	4.63	.....	1.12	T.	23	14	10	7	.....	Lloyd N. Felton.	
Hamps.....	Elbert.....	5,400	18	67.2	.....	88	4	47	26 ^f	36	4.35	+ 1.92	1.20	0	19	13	12	6	s.	W. Hamp.				
Hermit Lake.....	Custer.....	10,000	1	.....	.....	.....	.....	.....	.....	7.39	.....	1.49	0	22	5	10	6	sw.	John E. Graham.	
Hoehne (near).....	Las Animas.....	5,700	19	70.0	- 0.1	95	10	44	17	43	3.20	+ 0.95	0.70	0	16	18	6	7	w.	S. W. DeBusk.					
Holly.....	Prowers.....	3,380	16	76.7	- 0.3	100	5	53	18	40	1.52	- 1.41	1.32	0	3	23	7	1	se.	Holly Sugar Co.					
La Junta.....	Otero.....	4,052	.....	.....	.....	.....	.....	.....	.....	4.25	.....	1.56	0	19	4	16	11	.....	Fred B. Mason.	
Lake Moraine.....	El Paso.....	10,265	17	52.0	- 1.5	69	31	34	26	29	7.03	+ 2.78	1.07	0	27	2	14	15	sw.	C. C. McReynolds.					
Lamar.....	Prowers.....	3,582	21	78.0	+ 0.3	105	30	51	25	48	2.11	0.97	1.00	0	13	1	13	17	w.	J. T. Lawless.					
Las Animas.....	Bent.....	3,899	43	76.6	- 0.5	99	3	52	25	42	2.73	+ 0.73	1.19	0	7	7	10	14	ne.	F. M. Tague.					
La Veta Pass.....	Costilla.....	9,000	1	.....	.....	.....	.....	.....	.....	5.58	.....	1.91	0	13	4	16	11	n.	Clara M. Wright.	
Leadville.....	Lake.....	10,248	15	52.7	- 2.7	74	10	36	1 ^f	36	3.13	+ 1.90	0.75	0	19	4	16	11	.....	U. S. Weather Bureau.				
Limon (near).....	Elbert.....	5,360	4	68.4	.....	92	29	47	24 ^f	41	2.77	1.09	0	13	13	12	6	s.	F. L. Palmer.					
Madrid.....	Las Animas.....	1	.....	.....	.....	.....	.....	.....	.....	4.25	.....	1.56	0	19	.....	.....	.....	.....	.....	Thos. Sawyers.
Marshall Pass.....	Saguache.....	10,846	8	.....	.....	.....	.....	.....	.....	5.98	.....	1.10	0	15	6	12	13	w.	William D. Lillard.	
Monument.....	El Paso.....	7,200	.....	62.6	.....	91	22	43	10	40	4.59	.....	1.00	0	16	8	13	10	sw.	U. S. Forest Service.		
North Lake.....	Las Animas.....	8,700	19	.....	.....	.....	.....	.....	.....	5.58	+ 3.40	1.00	0	18	15	15	1	nw.	James W. Ingmire.	
Pueblo.....	Pueblo.....	4,734	23	72.6	- 1.6	93	22	54	25	36	2.81	+ 0.84	1.57	0	13	5	17	9	se.	U. S. Weather Bureau.					
Rocky Ford (near).....	Otero.....	4,177	22	74.4	- 0.1	95	47	54	25	37	1.51	- 1.25	0.57	0	18	9	9	4	w.	P. K. Blinn.					
St. Elmo.....	Chaffee.....	9,500	2	.....	.....	.....	.....	.....	.....	4.30	.....	0.55	0	16	9	14	8	sw.	Daniel Clark.	
Salida.....	do.....	7,035	12	63.2	- 2.1	86	11	39	31	44	3.68	+ 2.23	0.60	0	15	6	16	9	w.	M. D. L. Buell.					
Santa Clara.....	Huerfano.....	8,252	16	60.9	- 2.1	82	10	43	3	34	5.46	+ 2.22	1.04	0	22	0	26	5	se.	Lincoln G. Morris.					
Sheridan Lake.....	Kiowa.....	4,065	9	.....	.....	.....	.....	99	23	.....	2.05	.....	0	3	19 ^c	1 ^c	8	s.	Howard Gamble.	
Stonewall.....	Las Animas.....	8,000	5	.....	.....	.....	.....	.....	.....	7.93	.....	0.80	0	23	4	6	21	.....	G. A. Storz.	
Trinidad.....	do.....	5,994	15	.....	.....	.....	.....	.....	.....	2.47	+ 0.03	0.58	0	10	21	8	2	.....	Mrs. Mattie H. Butler.	
Victor.....	Teller.....	10,100	7	54.9	.....	72	9 ^f	39	24	27	6.12	.....	1.10	0	19	13	16	3	e.	Fred Jones.			
Villas.....	Baca.....	3,935	20	.....	.....	.....	.....	.....	.....	1.49	- 0.50	0.70	0	3	14	14	3	sw.	Carrie Konkel.	
Wayne.....	El Paso.....	7,864	17	60.5 ^b	- 1.1	82	10	38	31	40 ^b	1.92	- 0.81	0.56	0	9	3 ^b	11 ^b	15 ^b	nw.	J. C. Groff.					
Westcliffe.....	Chaffee.....	9,765	1	.....	.....	.....	.....	.....	.....	2.41	.....	0.60	0	24	1	19	11	w.	Zack Jordan.	
Winfeld.....	El Paso.....	65.4	.....	.....	.....	.....	.....	.....	.....	3.29	.....	0.68	0	13	6	12	13	s.	John G. Payne.	
Woodman Sanatorium.....	Lake.....	11,250	10	.....	.....	.....	.....	.....	.....	4.87	+ 1.51	0.75	0	19	0	19	12	nw.	Dr. J. E. White.	
Wortman.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	George C. Wortman.
<i>New Mexico.</i>																									
Abbott.....	Mora.....	5,771	2	.....	.....	94	30	55	25	35	2.56	.....	1.00	0	12	10	15	6	s.	Agt. E. P. & S. W. R. R.		
Albert.....	Union.....	4,700	20	76.2	- 0.8	99	6	55	25	35	2.49	- 0.39	0.70	0	9	.....	.....	.....	w.	Andrew Knell.		
Aurora.....	Colfax.....	8,849	2	.....	.....	.....	.....	.....	.....	5.41	.....	0.73	0	20	0	21	10	.....	Miss J. Lucero.	
Bell Ranch.....	San Miguel.....	4,500	12	70.0	.....	98	5 ^f	50	25	39	5.34	+ 2.28	2.60	0	13	11	16	4	sw.	C. M. O'Donel.				
Black Lake.....	Colfax.....	8,348	2	.....	.....	.....	.....	.....	.....	2.97	.....	0.75	0	19	0	20	11	w.	Ralph T. Marinez.	
Cabeza.....	San Miguel.....	5,406	2	.....	.....	.....	.....	.....	.....	2.30	.....	1.05	0	6	2	27	2	sw.	Agt. E. P. & S. W. R. R.	
Campana.....	do.....	4,493	2	.....	.....	9000	2	.....	.....	1.78	.....	0.82	0	8	2	26	3	sw.	Do.	
Chacon.....	Mora.....	9,000	2	.....	.....	.....	.....	.....	.....	5.28	.....	0.91	0	15	1	24	6	se.	Alfred Lucero.	
Cimarron (near).....	Colfax.....	6,355	7	66.2	.....	84	8 ^f	49	30	34	5.68	.....	0.94	0	18	6	10	15	se.	William French.			
Clayton.....	Union.....	5,178	6	72.7 ^b	.....	95	5	55	25	35	3.39	.....	0.85	0	9	19	6	6	ne.	Dr. W. W. Chilton.			
Clovis.....	Curry.....	4,129	.....	76.9	.....	100	5	55	25	35	3.39	.....	0.55	0	10	6	22	9	sw.	J. H. Barry.		
Cuervo.....	Guadalupe.....	4,849	2	76.0	.....	96	30	53	25	31	1.79	.....	0.55	0	10	6	22	3	sw.	Agt. E. P. & S. W. R. R.			
Dawson.....	Colfax.....	6,396	2	.....	.....	.....	.....	.....	.....	7.09	.....	2.42	0	18	0	22	9	sw.	Do.	
Elizabethtown.....	do.....	8,465	5	56.6	.....	77	10	33	31	40	5.30	.....	0.83	0	17	5	16	10	se.	Miss M. Carrington.			
Folsom.....	Union.....	6,399	11	67.8	- 0.5	86	5 ^f	49	25	34	6.71	+ 3.92	1.20	0	15	13	15	3	sw.	David Rope.					
Fort Union.....	Mora.....	6,335	51	64.4	- 4.6	82	31	40	28	30	3.47	- 0.45	0.60	0	14	10	18	3	s.	M. C. Needham.					
Hayden.....	Union.....	4,444	2	74.6	.....	96	5	54	25	30	3.31	.....	0.54	0	14	2	24	5	sw.	James B. Dickson.			
Hoosier Ranch.....	Mora.....	5,000	1	.....	.....	.....	.....	.....	.....	3.48	.....	1.64	0	8	5	22	4	sw.	W. H. Guthman.	
Johnson Park.....	Colfax.....	6,72																							

TABLE 1.—Climatological data for July, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.			Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
Texas.																				
Amarillo.	Potter.	3,676	19	75.4	-0.7	96	5	54	25	29	3.85	+0.68	1.15	0	18	7	19	5	se.	U. S. Weather Bureau.
Archer City.	Archer.	1									1.87	0.77	0	5	18	9	4	4	s.	Charles H. Thuman.
Arthur City.	Lamar.	590	19								2.80	-1.47	0.90	0	7	12	5	14	s.	V. V. Bright.
Bonham.	Fannin.	566	8	83.4		107	3	59	26	32	4.83	-2.43	2.47	0	9	13	9	9		H. M. Norman.
Canadian.	Hemphill.	2,339	4								3.75									Canadian Academy.
Childress.	Childress.	1,860	18								3.09	+0.35	1.00	0	6	8	10	13	s.	W. E. Davis.
Chillicothe.	Hardeman.	1,406	3								3.35		1.04	0	11					A. B. Connor.
Clarendon.	Donley.	2,719	6	78.4		104	5†	55	25	36	5.59		2.20	0	10	13	5	13	se.	Whitfield Carhart.
Clarksville.	Red River.	442	11	83.8	+0.7	104	5	58	31	42	2.80	-2.82	1.25	0	4	4	25	2		J. W. & D. C. Ry.
Claude.	Armstrong.	3,397	11								4.67		1.98	0	7					F. L. Kennard.
Dalhart.	Dallam.	3,998	6	76.4		97	5	54	25	34	3.60		2.01	0	11	10	7	14	sw.	E. B. Wilson.
Denison.	Grayson.	11									2.60	-1.80	0.80	0	9	8	2	11	s.	Robert L. Smith.
Finley.	Bowie.	1									1.18		0.68	0	2	20	0	11		C. K. Brown.
Henrietta.	Clay.	915	19	83.3	-0.4	106	5	58	14	32	5.89	+3.69	1.75	0	14	8	10	13	s.	A. C. Elliott.
Hereford.	Deaf Smith.	3,750	6								3.80		1.50	0	5	11	0	20	s.	P. G. Ruff.
Lewis Ferry.	Bowie.	2									5.15		1.05	0	12	10	9	12		Ft. W. & D. C. Ry.
Memphis.	Hall.	2,067	6	78.6		101	5†	60	26	33	5.29		1.35	0	12	17	8	6	s.	J. E. Kinney.
Miami.	Roberts.	2,743	5	79.4		105	5	54	25	35				0	9	20	2	9	se.	Dr. W. J. Joss.
Mobeetie.	Wheeler.	17																	Rev. P. A. Kaelin.	
Nazareth.	Castro.	5																	S. J. Allen.	
Ochiltree.	Ochiltree.	3,226	2	78.0		101	4	53	24	38	5.67		2.00	0	6					B. E. Finley.
Paris.	Lamar.	592	22	81.7	-0.7	104	5	60	25	31	2.92	-0.32	0.97	0	12	12	3	16	s.	Robert A. Miller.
Plemons.	Hutchinson.	4	78.2			99	5	59	15	34	2.34		0.72	0	7	13	5	5	s.	C. S. Solomon.
Quanah.	Hardeman.	1,563	6	82.3		108	5	58	25	30	3.75		0.80	0	8	11	6	14	s.	William H. Crawford.
Ringo Crossing.	Hopkins.	1									4.87		1.40	0	5					H. J. Palmer.
Romero.	Hartley.	1	76.0			97	5	54	25	36	3.05		0.70	0	11	12	17	2	s.	R. S. Chamberlain.
Sherman.	Grayson.	745	18	83.6	+1.3	102	5	65	25	35	3.36	-1.34	1.00	0	9	6	6	19	s.	R. A. Gibbs.
Stratford.	Sherman.	3,699	7	76.7		101	5	55	25	35	4.96		1.31	0	10	11	7	13	sw.	J. W. Elliott.
Sulphur Springs.	Hopkins.	530	17								2.96		1.86	0	3					John Neely.
Texline.	Dallam.	4,694	6	76.0		98	5	50	25	34	6.60	+2.43	1.80	0	15	2	29	0	s.	Ft. W. & D. C. Ry.
Tulia.	Swisher.	3,501	13								4.66	+1.97	1.76	0	11	20	8	3	s.	Lou Mulhall.
Wichita Falls.	Wichita.	958	19								3.85		1.02	0	9	7	21	3	se.	R. A. Thompson.
Winfield.	Titus.	1																	J. C. Bostick.	
Kansas.																				
Alden.	Rice.	1,684	1								4.46		1.27	0	8	13	0*	17*	ne.	L. B. Wait.
Anthony.	Harper.	1,329	14	79.2		108	5	52	25	36	4.81	+1.10	1.27	0	10	3	22	6	sw.	R. H. Eebe.
Ashland.	Clark.	1,951	23	80.0	+0.5	109	5	52	25	42	5.08	+1.09	2.52	0	14	6	22	3	se.	C. W. Carson.
Burlington.	Coffey.	1,010	18	79.4	+1.3	110	5	49	25	33	4.16	+0.25	1.15	0	10	0	30	1	se.	O. E. Sanford.
Chanute.	Neosho.	940	7	78.2		107	3	50	25	35	8.40		1.91	0	12	7	21	3	se.	C. W. Brown.
Coldwater.	Comanche.	2,090	14	79.4	+0.4	104	5	55	24	35	1.22	-2.22	0.46	0	11	20	7	4	se.	J. L. Stanley.
Columbus.	Cherokee.	898	21	78.1	+0.3	105	3†	52	25	32	8.57	+3.36	2.05	0	13	15	7	9	s.	O. E. Skinner.
Coolidge.	Hamilton.	3,348	14	77.2	+0.6	109	5	50	25	32	1.05	-1.97	0.30	0	5	9	22	0	se.	W. R. Padley.
Cottonwood Falls.	Chase.	1,234	7	78.8		108	5	47	25	39	5.18		1.24	0	13	18	4	9	sw.	E. B. Greene.
Council Grove.	Morris.	1,234	2	79.1		106	5	49	25	36	2.74		0.87	0	10	2	25	4	s.	J. P. Blackledge.
Cunningham.	Kingman.	1,680	27	78.6	+0.5	106	5	51	25	34	3.79	-0.28	1.70	0	7	9	19	3	s.	W. H. Morton.
Dodge City.	Ford.	2,513	37	76.8	-0.9	102	5	54	25	32	7.29	+3.91	3.51	0	10	10	15	6	se.	U. S. Weather Bureau.
Eldorado.	Butler.	1,291	9	79.4		105	5	49	25	33	5.58		1.55	0	10	16	11	4	s.	W. Y. Miller.
Ellinwood.	Barton.	1,790	36	78.5	+1.0	106	5	48	25	39	3.79	-0.19	1.35	0	11	1	29	1	sw.	Martin Musil.
Emporia.	Lyons.	1,138	30	78.7	+0.4	107	5	53	25	31	3.27	-0.46	0.83	0	12	13	3	3	s.	W. H. Boyles.
Eureka.	Greenwood.	1,079	15	78.0		108	4†	50	25	39	8.05	+3.95	2.60	0	8	11	17	3	sw.	W. S. Moonlight.
Fall River.	do.	925	15	78.8	+0.7	108	5	49	25	48	9.52	+3.67	2.00	0	12	19	9	3	s.	J. McDaniel.
Fargo.	Seward.	1									3.68		1.00	0	9	0	28	3	se.	N. B. Swink.
Fremonia.	Wilson.	864	8	79.8		108	3	54	25	34	8.05		2.19	0	16	11	10	10	se.	B. W. Holmes.
Garden City.	Finney.	2,836	23	79.2	+1.8	103	5	48	25	42	3.51	+0.26	1.90	0	8	11	19	1	s.	B. F. Stocks.
Great Bend.	Barton.	1,850	2								4.00		1.96	0	10	24	3	4	sw.	I. Prithet.
Greensburg.	Kiowa.	2,245	4	77.8		103	5	52	25	34	2.21		0.60	0	8	23	6	2	s.	C. C. Raymond.
Grenola.	Elk.	1,116	23	78.4	+0.5	106	5	51	25	35	8.17	+4.65	2.32	0	14	9	13	9	sw.	W. H. Lawyer.
Hess.	Gray.	2,700	5	74.8		98	29	51	24	35	3.36		0.90	0	7	0*	22*	2	se.	Fred Mallonee.
Howard.	Elk.	1,112	4								12.81		2.65	0	14	19	4	8	s.	J. W. Eby.
Houston.	Stevens.	7	77.2			107	5	44	25	50	1.47		0.60	0	8	14	14	3	se.	E. M. Anderson.
Hutchinson.	Keno.	1,535	21	79.2	+1.8	107	5	50	25	36	3.48	-0.74	0.88	0	11	17	11	3	sw.	E. S. Webster.
Independence.	Montgomery.	800	37	80.1	-0.6	109	5	51	25	39	5.87	+1.55	1.75	0	10	17	7	7	s.	F. L. Kenoyer.
Iola.	Allen.	984	5	77.9	-0.2	105	4	52	25	31	5.70	+1.78	1.57	0	10	17	7	7	s.	U. S. Weather Bureau.
Jetmore.	Hamilton.	3,440	1	78.0		103	5	54	25	45	1.29		0.64	0	7	3	13	9	s.	N. M. Herbig.
Kingman.	Hodgeman.	2,268	10	78.2		107	5	48	25	39	3.35	+0.15	2.15	0	6	4	24	3	s.	James Aiken.
Lake City.	Kingman.	1,504	3	80.2		108	5	50	25	35	3.81		1.02	0	10	7	23	1	sw.	Rodney Torrey.
Lakin.	Rush.	2,061	9	74.2		108	5	48	25	45	2.88		1.15	0	9	25	5	1	se.	C. H. Longstreth.
Larnell.	Kearney.	2,993	21	78.4	+1.6	108	5	46	25	50	0.76	-1.65	0.42	0	2	14	16	1	se.	J. C. Bowmen.
Lebo.	Pawnee.	2,090	26	79.4		107	5	52	24	36	2.13		1.58	0	11	22	6	3	s.	H. H. Wolcott.
Le Roy.	Coffey.	1,138	25	78.4	+0.6	108	5	52	25	34	4.94	+0.87	2.61	0	11	13</td				

TABLE 1.—Climatological data for July, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.									
<i>Oklahoma.</i>																				
Ada.	Pontotoc.	1,001	3	80.7	.....	106	5	60	24†	35	6.89	.....	4.16	0	12	8	17	6	s.	R. J. Brooks.
Alva.	Woods.	1,350	6	80.0	.....	106	5	53	25	34	6.28	.....	3.40	0	7	12	9	13	s.	S. A. Stech.
Apache.	Caddo.	1,255	2	81.0	.....	106	5	54	25	36	8.03	.....	2.90	0	12	13	14	4	se.	G. D. Teeter.
Arapaho.	Custer.	1,375	17	78.7	- 1.4	106	5	44	24	44	7.14	+ 3.46	1.90	0	12	14	14	3	s.	J. C. Brower.
Ardmore.	Carter.	872	10	83.4	+ 1.2	108	4†	58	25	33	3.13	+ 0.07	0.56	0	12	12	5	14	s.	H. T. Nisbett.
Arnett.	Ellis.	2,136	7	77.2	.....	103	5	52	25	33	6.90	.....	1.90	0	6	13	14	4	s.	C. H. Holmes.
Bartlesville.	Washington.	687	3	80.4	.....	109	4	54	25	34	6.14	.....	3.71	0	10	9	11	11	s.	Dr. A. P. Owens.
Beaver.	Beaver.	2,500	15	81.8	+ 1.2	107	5	53	25	36	2.63	- 0.14	1.01	0	8	19	10	2	s.	W. C. Frazer.
Blackburn.	Pawnee.	800	10	82.3 ^b	+ 2.0	109	5	54	25	36	4.40	+ 2.29	2.03	0	9	18	3	2	se.	John Landis.
Cache.	Comanche.	1,350	5	78.5	.....	105	5	52	25	33	8.60	.....	2.10	0	9	14	11	6	s.	Mrs. Frank Rush.
Calvin.	Hughes.	713	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.70	0	10	14	0	17	s.	Thomas Purcell.
Chandler.	Lincoln.	865	10	81.0	- 0.6	107	5	53	25	32	3.19	+ 0.38	1.12	0	7	17	1	13	s.	Chas. L. Kern.
Chatanooga.	Comanche.	1,150	5	81.5	.....	106	5	58	25	33	5.57	.....	1.27	0	12	10	17	4	se.	Squire Humble.
Chickasha.	Grady.	1,091	10	82.5	- 0.2	108	6	55	25	35	6.22	+ 4.03	2.57	0	11	23	8	0	s.	J. C. Good.
Cloud Chief.	Washita.	1,400	9	81.5	.....	109	5	55	25	34	6.72	.....	1.76	0	11	11	9	11	s.	J. P. Stutzman.
Durant.	Bryan.	643	10	82.0	+ 1.0	105	3	58	25†	33	3.02	- 1.32	0.84	0	11	12	7	12	s.	T. W. Lanham.
Eldorado.	Jackson.	1,456	4	82.4	.....	105	5	58	26	33	3.49	.....	1.25	0	10	2	24	5	se.	Rose E. Walker.
El Reno.	Canadian.	1,400	20	82.6	- 2.8	108	4	57	25	32	3.90	+ 0.83	1.40	0	12	16	13	2	s.	Uri B. Worcester.
Enid.	Garfield.	1,269	10	81.2	0.0	108	5	56	26	36	9.30	+ 6.05	2.57	0	11	18	7	6	s.	A. W. Hanes.
Erick.	Beckham.	2,055	6	80.0	.....	107	5	59	25	39	8.45	.....	3.33	0	10	12	14	5	s.	C. W. Prier.
Fairland.	Ottawa.	839	11	78.8	+ 0.2	105	3†	51	24	34	10.65	+ 6.97	3.30	0	12	5	20	6	s.	John T. Welsh.
Fort Gibson.	Muskogee.	556	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.33	0	9	14	2	15	s.	B. B. Bradley.
Frederick.	Tillman.	1,293	5	82.3	.....	110	6	58	25	34	6.59	.....	1.94	0	11	10	13	8	s.	S. W. Black.
Goodwell.	Texas.	3,300	1	79.0	.....	101	5	56	25	36	3.65	.....	1.37	0	11	11	5	11	s.	S. E. Snyder.
Guthrie.	Logan.	1,000	18	82.0	+ 0.4	109	4	54	25	37	6.34	+ 3.35	2.50	0	10	19	7	5	s.	A. L. Mordt.
Guymon.	Texas.	3,133	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.00	0	10	20	8	3	sw.	T. Compton.
Harrington.	Roger Mills.	2,200	7	76.8	.....	104	5	56	25	36	6.73	.....	1.92	0	8	12	13	6	sw.	Robt. Holmes.
Hartshorne.	Pittsburg.	700	12	82.6	+ 1.0	105	5†	51	25	32	6.59	+ 2.69	2.30	0	9	13	12	6	s.	C. H. Heald.
Healdton.	Carter.	900	17	82.0	+ 0.7	106	5	54	25	37	5.90	+ 2.08	0.98	0	13	9	22	0	se.	R. E. Ellis.
Helena.	Alfalfa.	1,396	3	80.2	.....	105	5	56	25	30	8.62	.....	1.90	0	12	18	12	1	s.	Mrs. M. C. Parks.
Hennessey.	Kingfisher.	1,166	16	80.5	+ 0.6	108	5	50	25	32	7.63	+ 3.93	2.18	0	10	2	27	2	s.	Leland Turnbull.
Hobart.	Kiowa.	1,396	8	82.2	.....	109	5	56	25	37	8.02	.....	2.12	0	12	9	14	8	s.	Eula L. Rutherford.
Hollenville.	Hughes.	900	10	81.6	+ 1.6	106	5†	57	25	32	3.79	+ 0.49	1.32	0	10	20	8	3	s.	H. N. Kelly.
Hoover.	Texas.	3,038	5	78.6	.....	106	5	52	25	35	3.47	.....	0.97	0	10	6	2	23	s.	Dr. C. W. Meyers.
Hurley.	Cimarron.	4,200	3	78.0	.....	99	5	58	31	37	3.66	.....	1.92	0	6	2	24	5	s.	M. L. Henderson.
Idabel.	McCurtaun.	474	3	80.7	.....	104	4†	55	25	34	4.21	.....	3.01	0	7	20	9	2	s.	T. E. Beck.
Jefferson.	Graut.	1,062	17	80.2	- 0.5	105	4†	54	25	33	4.55	+ 1.15	2.04	0	9	16	13	2	s.	Wm. M. Guy.
Kenton.	Cimarron.	4,000	10	74.8	- 1.3	97	5	52	25	39	2.42	+ 0.19	1.48	0	9	17	7	7	s.	J. C. Cross.
Kingfisher.	Kingfisher.	1,046	14	81.6	+ 0.4	106	6	54	25	32	7.36	+ 4.06	2.85	0	13	4	23	4	s.	Wm. Noble.
McAlester.	Pittsburg.	698	15	83.1	.....	107	5	56	25	32	3.69	- 0.20	1.24	0	8	13	10	8	s.	J. E. McNair.
McComb.	Pottawatomie.	1,200	17	80.2	+ 0.2	105	5	54	24	32	4.58	+ 1.69	1.99	0	10	12	6	13	se.	F. D. Dodson.
Mangum.	Greer.	1,585	18	81.0	- 1.0	108	5	58	25†	38	6.68	+ 4.15	2.25	0	12	12	6	13	se.	Wm. B. Anthony.
Marlow.	Stephens.	1,292	10	81.3	+ 0.6	107	5	58	25	34	5.66	+ 3.36	1.55	0	14	8	7	16	se.	G. C. Gray.
May.	Harper.	79.4	.....	106	5	51	25	36	5.03	.....	1.70	0	10	8	14	9	9	s.	Dr. J. H. Baugh.	
Meeker.	Lincoln.	1,030	17	81.6	- 1.0	109	5	57	25	36	2.87	+ 0.12	1.40	0	6	14	8	5	s.	J. Harry Randall.
Muskogee.	Muskogee.	614	12	81.8	+ 2.6	107	5	56	25†	32	7.22	+ 3.29	3.00	0	7	21	11	5	se.	Thos. Martin.
Mutual.	Woodward.	3	79.8	.....	110	5	50	25	37	6.81	.....	2.21	0	8	16	10	5	s.	R. N. Schooling.	
Neola.	Caddo.	1,500	5	79.6	.....	104	5	56	25†	34	8.00	.....	2.00	0	14	9	20	2	s.	P. H. Albright & Co.
Newkirk.	Kay.	1,149	13	82.0	+ 0.9	109	5	55	24	34	4.85	+ 1.43	1.25	0	10	16	13	2	s.	S. E. Boyd.
Norman.	Cleveland.	1,171	16	79.6	- 1.0	105	5	53	25	32	5.03	+ 1.83	1.50	0	15	3	28	5	s.	Dr. F. P. Osborn.
Oakwood.	Dewey.	1,854	1	78.3	.....	106	5	49	25	37	5.15	.....	1.40	0	11	12	6	8	s.	Dr. L. H. Murdoch.
Okeene.	Blaine.	1,194	7	80.0	.....	106	5	56	25	34	6.49	.....	2.05	0	14	22	6	3	s.	U. S. Weather Bureau.
Oklahoma.	Oklahoma.	1,247	20	79.5	- 0.3	103	5	58	25	37	3.74	+ 0.09	1.70	0	12	10	17	4	s.	J. L. Maynard.
Omulgee.	Omulgee.	752	7	81.8	.....	106	5	56	25	34	4.54	.....	3.19	0	7	11	8	12	s.	A. M. Foss.
Pauls Valley.	Garvin.	880	11	82.3	+ 2.0	105	3†	55	25	37	6.35	+ 2.68	6.68	0	6	16	12	3	s.	R. C. Block.
Pawhuska.	Osage.	918	11	82.8	+ 2.6	109	5	52	25	37	6.69	+ 2.33	3.00	0	14	7	20	4	se.	J. A. Douglass.
Perry.	Noble.	920	12	80.6	+ 0.1	108	5	55	25	33	6.37	+ 3.94	1.87	0	15	14	12	5	s.	R. G. Guptill.
Ravia.	Johnston.	796	8	82.4	.....	107	3	55	25	36	6.68	.....	0.79	0	6	18	6	7	s.	M. R. Gayle.
Sac and Fox Agency.	Pottawatomie.	1,041	18	81.2	+ 1.2	106	5	46	25	30	4.90	- 1.53	0.95	0	6	25	5	1	se.	Mrs. Kate Chatman.
Shawnee.	Kiowa.	1,356	4	81.8	.....	105	4†	56	25	35	4.53	.....	1.38	0	10	11	15	2	se.	Dr. W. C. Woodard.
Stillwater.	Payne.	880	18	80.0	+ 0.1	104	4†	56	25	31	4.41	+ 1.25	1.51	0	10	16	8	7	s.	A. R. Evans.
Tulsa.	Tulsa.	700	22	82.1	.....	108	4†	54	25	33	3.85	+ 0.59	2.30	0	11	21	9	1	s.	Dr. H. M. Hutchinson.
Vinita.	Craig.	698	7	79.7	.....	103	5	54	25	37	8.71	.....	3.20	0	10	14	0	17	nw.	W. C. Chamberlain.
Wagoner.	Wagoner.	588	14	82.1	+ 1.1	106	5	54</td												

TABLE 1.—Climatological data for July, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.							Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.			
Kentucky.																				
Blandville.	Ballard.	445	29	77.1	-0.8	97	4	55	25	29	3.11	-0.78	1.39	0	8	4	20	7	sw. E. W. Hort.	
Lynnvile.	Graves.		8																	
Tennessee.																				
Arlington.	Shelby.	29	78.0	-1.4	98	3	56	25	34	7.30	+3.56	2.40	0	14	9	11	11	s.	A. Thomas B. Etheridge.	
Bolivar.	Hardeman.	450	24	77.2	-1.3	99	3	56	25	30	5.12	+1.29	2.35	0	9	15	5	11	s.	Miss Mary A. Smith.
Brownsville.	Haywood.	361	26	77.0	-2.3	97	3†	55	27	32	4.49	+0.99	2.25	0	6	14	7	10	s.	Miss Hattie N. Moses.
Covington.	Tipton.	311	24	77.8	-1.6	96	4	56	25	28	2.05	-1.27	1.10	0	5	16	0	15	s.	James S. Ruffin.
Dyersburg.	Dyer.	310	28	79.0	-0.9	99	4	57	25	30	5.30	+1.05	2.00	0	7	20	5	6	se.	Miss Martha A. Sinclair.
Jackson.	Madison.	450	18	77.9	-1.2	102	4	52	25	40	2.97	-1.84	1.04	0	8	19	4	8	sw.	Shelby A. Robert.
Kenton.	Obion.	325	9	78.2	-1.2	102	4	55	25	32	4.30	-1.55	1.15	0	9	17	7	7	s.	George S. Martin.
Memphis.	Shelby.	409	40	78.6	-2.1	97	3	62	25	19	3.77	+0.20	1.30	0	13	7	7	17	s.	U. S. Weather Bureau.
Milan.	Gibson.	440	28	76.9	-2.3	97	3	55	25	29	3.22	-0.52	1.25	0	7	11	2	18	s.	Orlando F. Cantwell.
Trenton.	do.	345	28	77.4	-0.3	101	2†	50	23†	40	2.40	-0.98	1.18	0	5	21	5	5	sw.	F. L. Dennison.
Union City.	Obion.	360	13	80.0	+0.7	107	4	54	25†	43	1.69	-2.70	0.70	0	7	14	13	4	sw.	J. B. Kimzey.
Arkansas.																				
Alicia.	Lawrence.	7	77.2	-	98	4	55	25	30	4.25	-	2.05	0	6	18	9	4	s.	McCullough & Guelck.	
Amity.	Clark.	250	19	80.2	-	106	3	58	-	35†	4.78	-	2.09	0	9	-	-	-	s.	J. W. Campbell.
Arkadelphia (near).	do.	250	4	80.2	-	106	3	58	-	35†	4.78	-	2.09	0	9	-	-	-	s.	J. A. Ross.
Arkansas City.	Desta.	145	28	-	-	-	-	-	-	-	3.70	-0.18	1.10	0	11	-	-	-	s.	W. C. Blundell.
Batesville.	Independence.	271	6	-	-	-	-	-	-	-	4.78	-	2.28	0	10	-	-	-	s.	Lelia I. Teter.
Bee Branch.	Van Buren.	19	78.2	-1.4	100	2†	52	25	36	5.45	+1.74	1.45	0	10	9	10	12	s.	J. E. Scanlan.	
Benton.	Saline.	283	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	s.	P. B. Jackson.	
Bentonville.	Benton.	1,303	6	76.6	-1.1	100	5	51	25	30	7.44	+3.13	2.24	0	13	13	9	9	s.	U. S. Weather Bureau.
Bergman.	Boone.	1,324	15	73.0	-2.9	102	4	43	25	40	4.34	-1.42	1.75	0	10	18	8	5	se.	John T. Maxey.
Black Rock.	Lawrence.	259	7	-	-	-	-	-	-	-	4.24	-	1.40	0	5	-	-	-	s.	S. J. Howe.
Brinkley.	Monroe.	226	25	78.5	-1.3	102	4	56	25†	32	0.38	+2.41	1.88	0	10	-	-	-	s.	H. L. D. Whitsitt.
Calico Rock.	Izard.	361	7	-	-	-	-	-	-	-	4.24	-	1.30	0	9	-	-	-	s.	W. H. Stoner.
Camden.	Coachita.	158	28	80.0	-1.1	98	3†	54	27	35	2.42	-1.98	0.63	0	13	-	-	-	s.	R. H. Quarterman.
Centerpoint.	Howard.	470	11	80.4	-1.2	103	3	54	26	34	5.89	+0.71	2.00	0	11	7	7	17	se.	J. M. Huddleston.
Clarendon.	Monroe.	171	7	-	-	-	-	-	-	-	7.01	-	1.48	0	17	-	-	-	s.	Jeff J. Babbs.
Conway.	Faulkner.	309	25	79.8	-0.6	103	3†	55	26	34	4.51	+0.94	1.45	0	13	8	18	5	se.	Mrs. B. E. Bishop.
Corning.	Clay.	293	19	77.5	-1.4	99	4	54	25†	30	6.11	+2.68	3.18	0	11	12	7	7	s.	G. H. Burr.
Dardanelle.	Yell.	330	25	79.4	-	102	4	55	25	31	2.92	-1.30	1.00	0	10	-	-	-	s.	Jacob Brobst.
Dodd City.	Marion.	1,175	30	77.3d	-2.7	100	-	52	-	36d	7.08	+2.10	3.22	0	7	-	-	-	s.	A. Bernard.
Dutton.	Madison.	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	s.	Neal Dodd.	
Eldorado.	Union.	265	7	79.1	-	97	1†	57	27	27	5.06	-	1.60	0	13	-	-	-	s.	J. M. Ricketts.
England.	Lonoke.	5	79.0	-	100	1†	53	25	32	3.53	-	0.62	0	12	8	4	19	se.	Jeff J. Babbs.	
Eureka Springs.	Carroll.	1,465	9	77.0	-	99	4†	50	25	33	5.94	-	1.15	0	9	5	24	2	sw.	J. C. Chenault.
Fayetteville.	Washington.	1,451	22	77.6	+0.2	102	3†	51	25	34	5.06	+0.25	2.15	0	12	6	21	4	s.	George W. Nicholds.
Fortyday.	Dallas.	7	78.9	-	98	4	53	26	27	4.14	-	0.75	0	11	7	20	4	s.	University of Arkansas.	
Fort Smith.	Sebastian.	481	29	80.6	-0.4	102	4	58	25	28	5.38	+1.54	2.21	0	14	7	9	15	e.	A. Tredick.
Fulton.	Hempstead.	264	-	-	-	-	-	-	-	-	3.73	-	1.08	0	8	-	-	-	s.	U. S. Weather Bureau.
Hardy.	Sharp.	643	13	77.2	-1.3	98	4	50	25	30	3.28	-0.82	1.17	0	13	3	15	13	sw.	B. C. Logan.
Helena.	Phillips.	182	26	78.2	-3.2	97	3	50	26	29	3.78	-0.24	1.12	0	14	-	-	-	s.	C. A. Caywood.
Hot Springs.	Garland.	600	5	79.2	-	101	4	52	25	32	6.20	-	1.70	0	10	13	12	6	s.	B. F. Modisett.
Huttig.	Union.	85	4	79.6	-	99	2	57	-	28d	3.93	-	0.83	0	17	1	29	1	s.	Hot Springs Water Co.
Jonesboro.	Craighead.	345	16	77.4	-3.4	101	4	50	25	40	5.88	+2.05	1.80	0	10	7	20	4	s.	C. A. Berry.
Junction.	Union.	18	79.2	-1.4	102	4	58	26	32	8.59	+4.73	2.32	0	9	13	5	13	s.	Benedictine Sisters.	
Lake Farm.	Jefferson.	195	4	78.6	-	101	3	52	26†	37	4.97	-	1.51	0	11	8	16	7	s.	J. A. Lowderback.
Lewisville.	Lafayette.	262	8	81.1	-	105	4	59	25†	31	4.44	-	1.00	0	11	5	15	11	s.	R. H. Gillispie.
Little Rock.	Pulaski.	357	32	78.6	-2.0	97	4	62	25	21	3.24	-0.75	1.28	0	11	4	5	22	e.	F. W. Youmans.
Lutherville.	Johnson.	775	14	78.4	-0.4	99	4	58	25	28	3.48	-0.40	0.66	0	14	11	13	7	s.	U. S. Weather Bureau.
Malvern.	Hot Spring.	277	24	78.4	-2.8	102	3	55	25	31	5.06	+2.08	2.15	0	11	-	-	-	s.	G. H. Hentschel.
Mammoth Spring.	Fulton.	512	7	77.0	-	97	2†	51	25	34	3.80	-	1.32	0	12	7	20	4	s.	Miss L. C. Smith.
Marked Tree.	Poinsett.	229	7	-	-	-	-	-	-	-	4.50	-	2.60	0	8	-	-	-	s.	F. Wallack.
Mena.	Polk.	1,100	25	77.4	-3.3	96	2†	58	25	32	3.77	-1.06	2.04	0	9	10	13	8	w.	L. Smith.
Newport.	Jackson.	231	27	78.3	-1.8	99	4	57	25	29	5.50	+2.39	2.00	0	9	-	-	-	s.	K. R. St. John.
Ozark.	Franklin.	377	20	80.2	-2.1	101	2†	52	26	30	3.70	-0.09	0.98	0	9	16	13	2	e.	Chas. Spragg.
Pine Bluff.	Jefferson.	215	23	79.4	-3.0	100	3	57	25	30	3.55	+0.01	1.00	0	14	-	-	-	s.	R. M. Adams.
Pond.	Randolph.	19	78.2	-1.2	103	4	55	26	32	9.48	+4.97	5.20	0	9	12	12	7	s.	J. M. Hudson.	
Portland.	Benton.	1,250	14	76.6	0.0	101	3†	47	25	32	7.04	+1.98	2.43	0	8	2	21	8	s.	Benedictine Sisters.
Ashley.	Miller.	122	2	79.4	-	98	2	60	25	27	8.75	-	5.25	0	16	-	-	-	s.	A. F. Stevens.
Nevada.	Miller.	327	23	79.6	-2.3	103	4	55	26†	35	3.50	+0.62	0.62	0	13	-	-	-	s.	L. W. Gregory.
Rogers.	Benton.	1,385	20	76.2	-0.7	101	5	50	25	32	4.16	-0.43	1.71	0	11	11	9	s.	A. M. Ellsworth.	
Springbank.	Miller.	182	4	-	-	-	-	-	-	-	3.74	-	2.04	0	14	-	-	-	s.	Carl A. Stark.
Arkansas.	Sharkey.	495	24	79.0	-1.7	100	4	53	25	32	4.29	-0.45	0.88	0	14	12	19	0	sw.	G. Field.
Subiaco.	Tunica.	1,050	15	78.2	-1.6	105	4	54	26	34	5.98	+2.15	1.75	0	11	18	7	6	ne.	H. A. Buerkle.
Swain.	Panola.	2,300	73-2	-	-	-	-	-	-	-	2.68	-	2.08	0	14	1	16	14	s.	New Subiaco Abbey.
Texarkana.	Calhoun.	332	27	80.5	-1.6	99	3†	60	25	25	5.62	+2.53	1.66	0	12	-	-	-	s.	George Paxton.
Warren.	Acorn.	470	23	77.6	-1.2	100	2†	56	26	30	3.22	-0.59	0.65	0	10	-	-	-	s.	D. E. Moore.
Whitecliffs.	Little River.	304	16	79.4	-2.5	100	2†	56	26	30	4.07	-	1.65	0	10	-	-	-	s.	W. J. Savage.
Wiggs.	Garland.	206	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	s.	John E. Payton.	
Wynne.	Cross.	250	3	77.8	-	100	4	54	25	31	3.05	-	0.80	0	12	-	-	-	s.	S. D. Jester.
																				John Seals.
Mississippi.																				
Anguilla.	Sharkey.	107	3	78.7	-	96	1†	57	26	27	6.01	-	1.02	0	12	6	7			

TABLE 1.—Climatological data for July, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total rainfall, unadjusted.	Number of rainy days 0.01 inch or more.	Number of partly cloudy days.	Number of cloudy days.			
<i>Mississippi—Contd.</i>																			
Greenville.	Washington.	126	24	79.9	-1.9	98	†2	58	26	28	4.15	-0.16	1.38	0	17	10	3	18	se.
Greenwood.	Leflore.	140	11	79.0	-1.7	100	2	51	26	37	1.63	-3.91	0.66	0	13	10	10	11	sw.
Grenada.	Grenada.	124	2											0	9	18	8	5	se.
Hernando.	De Soto.	391	23	78.8	-1.4	99	31	58	25†	30	4.54		1.83	0	10	14	7	10	ne.
Hickory Flat.	Benton.	435	2	77.5	-2.8	98	3	55	25†	27	8.10		3.35	0	15	7	22	2	s.
Holly Springs.	Marshall.	600	24	77.5	-2.8	98	3	55	25†	27	5.07	+0.76	1.30	0	13	10	8	13	se.
Kosciusko.	Attala.	430	21	78.3	-1.4	97	2†	56	26	29	6.07	+1.26	1.98	0	13	14	9	8	se.
Lake Cormorant.	De Soto.	206	2																Tallahatchie Drainage Com.
Lula.	Coahoma.	182	2																W. F. Wood.
Malone.	Marshall.																		Tallahatchie Drainage Com.
Marks.	Quitman.	163	2																L. B. Mosby.
Natchez.	Adams.	206	23	78.0	-3.0	94	†1	62	26†	27	15.50	+10.30	4.68	0	15	7	0	24	se.
New Albany.	Union.	398	2																F. L. Garrity.
Pontotoc.	Pontotoc.	475	22	76.6	-2.3	95	3	57	25	24	6.38	+1.52	1.50	0	12	5	23	3	se.
Port Gibson.	Claiborne.	116	23	78.8	-2.3	93	1†	58	26†	30	8.50	+3.96	2.20	0	15	5	4	22	sw.
Rosedale.	Bolivar.	143	3	79.2	-2.0	102	2	57	25	29	4.15		1.72	0	8	8	3	20	sw.
Senatobia.	Tate.	284	2																T. J. Murray.
Shoecoe.	Madison.	8	77.5																J. C. Pitchford.
Suffolk.	Franklin.	10	78.4	-1.9	93	2†	60	26†	28	12.76	+5.63	2.55	0	19	9	12	10	sw.	Prof. George H. Kent.
Swan Lake.	Tallahatchie.	148	6																B. F. Saunders.
Tchula.	Holmes.	130	6	79.2															Dr. M. P. Winkler.
Utica.	Hinds.	287	7	78.4															Dr. J. B. Dudley.
Vicksburg.	Warren.	247	40	78.4	-2.0	92	2	64	18	22	6.22	+1.80	1.27	0	15	1	13	17	se.
Water Valley.	Yalobusha.	300	22	77.9	-2.3	98	2†	56	25†	29	5.15	+0.77	1.30	0	12	13	10	8	s.
Woodville.	Wilkinson.	569	18	78.0	-3.4	91	1†												Miss Louisa Erikson.
Yazoo City.	Yazoo.	116	17	79.5	-2.5	98	12	56	26	30	6.64	+2.08	1.29	0	12	10	10	11	se.
<i>Louisiana.</i>																			
Abbeville.	Vermilion.	18	23	80.2	-1.4	93	3†	66	28	26	12.26	+3.68	2.92	0	21	6	13	12	se.
Alexandria.	Rapides.	77	23	79.4	-0.6	95	21	61	26†	29	8.95	+3.09	1.73	0	13	7	3	21	s.
Amite.	Tangipahoa.	130	23	79.1	-2.2	94	2†	62	26†	29	10.34	+2.10	2.00	0	13	5	25	1	s.
Avoca Island.	St. Mary.																		J. N. Pharr & Sons (Ltd.).
Baton Rouge.	East Baton Rouge.	60	23	80.5	-0.9	95	24	63	26†	29	15.92	+9.50	3.50	0	10	14	3	12	e.
Burnside.	Ascension.	2	11	79.4	-1.5	93	2†	65	29	25	10.45	+3.82	2.70	0	14	6	12	13	w.
Burwood.	Plaquemines.	1	23	82.0	-0.5	93	2	69	4	17	8.13	+0.87	3.00	0	10	10	13	8	se.
Cades.	St. Martin.	1	81.0																C. E. Smedes.
Calhoun.	Ouachita.	180	23	79.8	-1.5	98	4	54	27	33	3.45	-1.02	0.87	0	14	5	19	7	s.
Cameron.	Cameron.	6	18	80.5															N. Louisiana Exper. Sta. State biological station.
Carrollton.	Orleans.	7		80.4															Loyola College.
Cheneyville.	Rapides.	67	23	80.4	-1.2	96	1†	62	26†	29	13.53	+8.17	2.55	0	15	6	19	8	s.
Cincinatti.	West Baton Rouge.	1	79.9																Walter I. Tanner.
Clinton.	East Feliciana.	113	23	77.6	-3.2	92	31	62	28†	26	10.99	+3.96	1.87	0	21	4	7	20	s.
Collinston.	Morehouse.	65	10	80.2	-1.9	99	2	55	26	34	4.40		0.95	0	11	4	19	8	se.
Covington.	St. Tammany.	39	19	79.7	-1.5	95	24	63	27†	29	8.81	+1.34	1.59	0	17	8	11	12	s.
Dodson.	Winn.	2	80.1																J. P. Lucas.
Donaldsonville.	Ascension.	33	23	80.8	-0.4	97	4	68	19	26	14.71	+8.94	2.85	0	12	16	1	14	s.
Dutchtown.	do.																		Picard & Geismar (Ltd.).
Farmerville.	Union.	177	23	78.2	-2.9	94	1†	58	26	28	7.74	+3.01	3.22	0	15	6	12	13	s.
Ferriday.	Concordia.	4	79.0																R. Z. Schlatner.
Franklin.	St. Marys.	10	19	81.0	-1.1	98	12	67	28	27	14.33	+4.89	2.34	0	19	6	11	14	s.
Grand Cane.	De Soto.	302	17	77.5	-3.8	100	3	54†	26	35	8.01	+5.42	2.00	0	18	2	13	16	s.
Grand Coteau.	St. Landry.	93	23	80.4	-0.9	96	3	64	26	27	11.29	+4.81	6.27	0	11	9	19	3	s.
Hammond.	Tangipahoa.	44	19	79.4	-2.0	95	1†	62	28	32	7.37	+1.00	3.65	0	9	17	11	3	se.
Houma.	Terrebonne.	23	77.5	-4.0	93	2†	60	27	32	31	11.90	+2.67	1.90	0	16	13	0	18	w.
Jena.	Catahoula.	80.0																	H. M. Foote.
Jennings.	Calcasieu.	30	14	79.1	-2.4	95	10	67	26	23	13.03	+7.20	3.48	0	19	4	17	10	se.
Lafayette.	Lafayette.	36	23	79.4	-1.8	92	3†	66	22	22	11.09	+3.95	2.30	0	18	3	12	16	e.
Lake Charles.	Calcasieu.	22	23	79.8	-1.5	98	1	64	27	27	7.40	+0.76	2.00	0	11	14	0	17	s.
Lakeside.	Cameron.	9		80.2	-1.8	97	3	68	18	25	7.38		2.52	0	13	19	5	7	sw.
La Rose (near).	La Fourche.			79.0															L. J. Nunnemacher.
Lawrence.	Plaquemines.	6	20	81.5	-1.2	99	2	68	27	27	5.63	-1.59	1.91	0	15	9	13	9	s.
Leesville.	Vernon.	4																	H. C. Warmoth.
Liberty Hill.	Bienville.	23	81.7	-0.9	101	1†	57	26†	31	5.25	0.00	1.20	0	15	6	9	16	s.	
Logansport.	De Soto.	192	7																E. A. Crawford.
Melville.	St. Landry.	45	23	79.6	-2.0	95	30	61	26†	30	9.56	+3.64	3.30	0	17	9	5	17	se.
Minden.	Webster.	194	23	79.8	-2.5	102	3	58	26†	31	6.55	+2.43	1.62	0	17	6	11	14	s.
Monroe.	Ouachita.	82	23	80.6	-1.6	95	1	60	27	30†	3.73	-1.23	1.43	0	13	13	2	16	n.
Morgan City.	St. Marys.	14	5																Virgil E. Kinsey.
Newellton.	Tensas.	4	80.0																John D. Fultz.
New Iberia.	Iberia.	15	23	80.7	-0.7	92	2†	69	26†	19	12.84	+5.51	3.05	0	18	3	19	9	se.
New Orleans (1).	Orleans.	51	40	80.2	-1.1	95	24	70	18	17	8.40	+1.93	2.71	0	14	0	16	15	se.
New Orleans (2).	do.	18	23	81.0	-1.3	96	30	65	27	27	4.70	+2.02	1.35	0	15	0	9	22	s.
Opelousas.	St. Landry.	88	19	81.0	-0.6	98	3	61	6	32	11.79	+5.58	3.67	0	11	12	5	14	s.
Paradis.	St. Charles.																		Louisiana Meadows Co.
Pearl River.	St. Tammany.	29	5																George F. Bancks.
Plain Dealing.	Bossier.	268	19	81.3	-0.3	102	3†	56	26	32	4.44	-0.44	2.10	0	11	16	5	10	e.
Rayne.	Acadia.	44	19	80.3	-1.9	95	3	65	26†	28	9.13	+2.15	3.10	0	15	10	1	20	s.
Reserve.	St. John Baptist.</td																		

TABLE 2.—*Daily precipitation for July, 1911. District No. 7, Lower Mississippi Valley.*

Stations.	Watershed.	Day of month.																														Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
<i>Colorado.</i>																																			
Blaine.....	Cimarron.....	.37	.10	..	.18	1.37	2.34			
Buena Vista.....	Arkansas.....	.30	.10	.32	.03	.60	.10	2.44			
Cathalan.....	Big Sandy.....	T.	.40	.34	T.	.20	.73	T.	.31	2.81			
Canon City |||.....	Arkansas.....	T.	.32	.25	.20	..	T.	.05	.01	.16	T.	T.	..	.20	..	.04	.05	..	.28	.03	T.	T.	.20	.14	1.87			
Colorado Springs.....	Fountain.....	.16	.33	T.	T.	.10	.01	.05	T.	..	T.	T.	T.	.64	T.	.39	.10	..	.32	T.	T.	..	.01	.05	T.	T.	T.	T.	T.	2.17			
Cripple Creek.....	Oil Creek.....				
Cuchara Canips.....	Cucharas.....	.39	.61	.09	..	.06	.75	.1603	.51	2.62	.06	.82	6.33			
Ea Is.....	Big Sandy.....				
Fairview.....	St. Charles.....	.60	.02	..	.2731	.37	.19	.05	.81	..	.50	.33	..	.63	4.56				
Fremont Experiment Station.|||.....	Fountain.....	.28	.61	.02	T.	.62	.04	.32	T.	.10	T.	.19	..	.25	.42	..	.69	.22	..	.81	..	.23	.02	.26	.21	.04	.08	.01	..	5.42					
Garfield.....	L. Arkansas.....	.08	1.12	.19	.09	.04	.44	T.	.05	..	.06	.19	.10	.13	.08	.13	.35	.36	T.	.09	.38	.03	T.	.44	.02	.15	.01	T.	T.	4.63					
Hamps.....	Big Sandy.....	..	.02	..	.17	..	.07	..	.552035	..	.04	.70	.05	..	.1,20	4.35				
Hermit Lake.....	Grape Creek.....	1.40	.67	.19	.12	..	.40	..	..	..	.35	..	.30	..	.37	.89	.30	.42	.05	.18	.11	.54	.50	.08	.14	.07	.11	.10	.10	7.39	
Hoshne (near).....	Purgatoire.....	.10	.07	..	.18	.10	.11	.33	.05	..	..	.70	.10	..	.05	.32	.20	.22	.45	..	T.	.12	..	..	..	..	..	..	..	3.20
Holly.....	Arkansas.....	..	.18	..	.02	..	.1,32	1.52				
La Junta.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake Moraine.....	Fountain.....	.04	1.04	.12	.14	.06	.45	.35	.07	T.	.09	.25	.30	.03	.07	.08	.18	.80	.28	.02	.13	.07	.11	.63	.28	.05	.07	.25	..	7.03					
Lamar.....	Arkansas.....	..	.42	.18	.48	T.	.1,1912	..	.21	..	T.	13.73				
Las Animas.....	Cucharas.....	1.91	..	.18	.09	..	..	..	..	..	.18	.30	.09	.11	.93	.59	.74	.15	..	..	..	..	..	..	..	..	..	..	..	5.58
Leaville.....	Arkansas.....	.02	.75	.43	.06	.52	.16	.06	T.	.06	T.	.03	.04	.14	.01	.02	.03	.35	.27	..	.06	.10	.02	..	T.	T.	..	..	3.13				
Limon (near).....	Big Sandy.....	T.	.05	.15	T.	.1,09	..	.10	T.	.14	.21	.03	T.	.34	..	.09	.41	2.77				
Madrid.....	Purgatoire.....	..	.29	.46	.03	..	.01	..	..	.10	.15	.02	.39	.10	.11	.23	.04	.04	.1,50	.11	..	.14	.15	..	..	..	..	..	..	4.25
Marshall Pass.....	Arkansas.....	1.01	1.10	.15	.12	.03	.30	.45	..	..	.25	..	.31	.23	.62	.20	.12	.40	.55	..	..	..	..	..	..	..	..	..	..	5.98
Monument.....	Fountain.....	.33	.38	..	.12	..	..	.02	.1,00	.40	..	..	..	..	..	..	..	.55	..	.35	.12	..	..	..	..	..	..	..	..	4.59
North Lake.....	Purgatoire.....	.10	.53	..	.10	..	.10	.01	.05	.03	..	.20	..	..	..	..	..	.73	.70	..	.15	.97	.15	.81	.50	.05	.16	.25	..	6.68
Pueblo.....	Arkansas.....	T.	1.04	.54	T.	.15	.0312	T.	.02	T.	.04	.01	.5015	..	.01	2.81				
Rocky Ford (near).....	..	..	.22	..	.35	.14	..	..	..	..	..	..	T.	.26	..	.25	.05	.24	..	.36	.05	.47	.52	..	.12	.02	T.	..	..	1.51
St. Elmo.....	Chalk Creek.....	.85	.40	.21	.05	.21	T.	..	..	.30	..	.25	.05	.24	..	.36	.05	.47	.52	..	..	..	..	..	..	..	..	..	..	4.30
Saltillo |||.....	Arkansas.....	.20	.60	.23	.48	..	.46	.15	..	.02	.14	T.	.27	..	.23	.07	.40	.10	.08	..	..	..	..	..	..	..	..	..	..	3.68
Santa Clara.....	Huerfano.....	T.	.08	.14	.45	.13	.63	.18	T.	.15	..	.08	.13	.15	T.	.23	.26	..	.02	.20	.04	.87	.12	.03	.08	.05	..	41	T.	T.	5.46				
Sheridan Lake.....	Arkansas.....	.42	2.05				
Stonewall.....	Purgatoire.....	.16	.20	.16	.80	.25	.70	..	..	.10	.32	.80	.78	..	.01	.29	.34	.25	.18	.40	..	.38	.28	..	.30	.23	.22	.14	..	7.83		
Trinidad.....3204	.58	.12	..	.27	2.47				
Victor.....	Oil Creek.....	1.10	.12	..	.43	..	.4207	.30	.73	.04	.22	.83	.28	.29	.48	T.	.12	.05	.06	.08	.40	T.	..	6.12
Vilas.....	Cimarron.....09	1.49			
Wayne.....	Arkansas.....	.34	.12	.11	.02	.60	.33	.13	..	T.	.4503	3.17				
Westcliffe.....	Grape Creek.....	.2534	.05	1.92			
Winfield.....	Clear Creek.....	.01	.60	.18	.06	.02	.04	.02	T.	.01	.02	.13	.05	T.	.07	.45	.18	.13	.01	.23	.12	.02	.01	.01	.01	T.	.01	.02	.02	.02	2.41				
Woodman Samatotrium.....	Fountain.....	.45	.30	T.	.04	.08	.03	.4008	T.	T.	.32	.26	.68	.16	..	.03	.43	T.	3.29			
Wortman.....	Arkansas.....	.10	.40	.32	T.	.61	.33	.75	.43	.13	..	.20	T.	T.	.30	.10	T.	T.	.20	.10	T.	T.	.10	.22	.13	.15	T.	.20	T.	..	4.87				
<i>New Mexico.</i>																																			
Abbott.....	Canadian.....	.02	..	.01	..	.2335	.05	.44	2.56				
Albert.....	..	.2622	.12	..	.70	.15	.38	2.49				
Aurora.....	..	.32	.10	.15	.04	.24	.50	.11	..	.09	..	.05	.02	.66	.26	.04	.28	..	.03	.18	.14	.02	.66	.02	..	.11	.55	.73	.02	5.41					
Bell Ranch.....	..	..	.10	..	.02	..	..	..	..	.03	.15	..	.08	.24	.17	..	..	.26	.81	.71	..	..	..	..	..	..	..	..	..	5.34
Black Lake.....	..	.18	.22	.12	.06	.07	.30	..	..	.06	..	.30	..	.09	.13	..	.27	..	..	.02	.04	..	..	.25	..	..	..	..	..	2.97
Cabeza.....	..	.15	..	..	..	..	..</																							

TABLE 2.—*Daily precipitation for July, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 7—Continued.*

Stations.	Watershed.	Day of month.																														Total.									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31									
<i>Oklahoma.</i>																																									
Ada.	Canadian.	T.	T.	.25	T.	.07	.02	T.	.23	T.	.05	.05	T.	.27	4.16	.	33	T.	.01	.10	.	.35	6.89									
Alva.	Arkansas.	T.	T.	.38	T.	.130	.01	T.	.35	.30	T.	.340	T.	.09	2.90	T.	.	T.	.40	.	.15	.	.15	6.28								
Apache.	Red.	.53	.11	.69	.09	1.05	.01	T.	.30	.40	T.	.09	2.90	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7.14
Arapaho.	Washita.	.23	.22	.12	.	.1.10	.	T.	.11	.55	.34	.	1.42	1.90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ardmore |||	Red.	T.	.46	T.	.56	.	.	T.	.15	.20	T.	.20	.15	.42	.40	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Arnett.	Canadian.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	1.90	1.00	T.	1.50	.90	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6.90
Bartlesville.	Arkansas.	T.	.12	.02	.05	.01	.27	.	T.	.38	.	.27	.24	T.	.50	.17	T.	.3	7.1	.	.01	.11	.	1.46	6.14							
Beaver.	Canadian.	T.	T.	.02	T.	.04	.	T.	.02	.01	T.	.02	.01	T.	.07	.03	T.	.52	.	.14	.	.70	.	.	.	.	.	.	.	.	.	2.63
Blackburn.	Arkansas.	T.	.62	.	.12	.36	.	T.	.36	.	T.	.62	.32	T.	.64	2.10	T.	.40	T.	.70	.	.30	.	8.66									
Cache.	Red.	.88	1.10	.	.	.2.00	.	T.	.62	.	T.	.14	.	T.	.70	1.70	T.	.58	.	.06	.95	.	10	4.56									
Calvin.	Canadian.	T.	T.	.12	.14	.	T.	.07	T.	.	T.	.47	.	T.	.19	.	T.	.70	.41	T.	.	.10	.	3.19									
Chandler |||	do.	T.	.50	.51	.26	.20	.	T.	.27	.24	T.	.50	.17	T.	1.20	1.27	T.	.	T.	.27	.	.18	.	5.57									
Chattanooga.	Red.	T.	T.	.32	.15	.48	.07	T.	.40	.06	T.	.25	.37	T.	1.22	2.57	T.	.	T.	.33	.	6.22										
Cloud Chief.	do.	T.	.48	.18	T.	.11	.	T.	.55	.30	T.	.36	.45	T.	1.76	1.75	T.	.	T.	.18	.	.08	.17	.	14	3.02							
Durant |||	Red.	T.	.02	T.	T.	.06	T.	.07	.	T.	.02	.03	T.	.28	.26	T.	.17	.24	T.	.33	.81	.	T.	1.25	T.	3.49							
Eldorado.	do.	T.	1.40	.02	.01	.	T.	.02	.	T.	.44	.30	T.	03	1.08	T.	24	0.8						
El Reno.	Canadian.	T.	.2.57	.	.	.	T.	.10	T.	.09	1.63	.45	T.	.45	.95	T.	.48	.03	T.	.	.53	.18	.	8.45	10	9.30							
Enid |||	Cimarron.	T.	.53	T.	T.	1.40	.	T.	.35	.12	T.	.96	T.	3.33	.02	T.	T.	T.	.	1.25	T.	.	45	10.65								
Erick.	Red.	T.	.09	3.30	T.	T.	.	T.	.44	.86	T.	.28	T.	.62	.	T.	.08	.12	T.	.	03	3.10	T.	.09	.04	.	09	3.46					
Fairland.	Arkansas.	T.	.61	.45	.62	.	T.	.03	.53	T.	.10	.63	T.	.33	.50	T.	.77	.12	T.	.	.28	.	05	6.59								
Fort Gibson.	do.	T.	.38	T.	.15	.11	.	T.	.44	.40	T.	.67	1.94	T.	1.25	.92	T.	.	T.	.77	.04	.18	.	21	.	11	1.37	.	28	3.65			
Frederick.	Goodwell.	T.	.12	T.	.13	.	T.	.40	.	T.	.04	.	T.	.77	.	T.	20	.	04	6.34				
Guthrie.	Cimarron.	T.	.48	.	.37	.	T.	.53	.	T.	.40	.	T.	.51	.43	T.	.63	.	T.	.	3.00	.	1.38	.	36	8.09						
Guymon.	Canadian.	T.	.60	.	.	.	T.	.	T.	.1.34	.	T.	.30	.	T.	.77	1.92	T.	63	.65	.	52	6.73	
Harrington.	Canadian.	T.	T.	.05	.	.	T.	.47	.	T.	.1.55	.	T.	.83	.	T.	.2.30	.	T.	.70	09	.37	.	23	6.59
Hartshorne.	Canadian.	T.	.61	.45	.62	.	T.	.03	.53	T.	.10	.63	T.	.47	.48	T.	.98	.	T.	.	.27	T.	.	26	5.90							
Healdton.	Red.	T.	.1.47	.	.	.	T.	.70	.42	T.	.45	.90	T.	.95	1.07	T.	1.55	1.90	T.	.	.29	.04	.	25	8.62							
Helena.	Cimarron.	T.	.10	2.18	.35	T.	.	T.	.15	.70	T.	.1.20	.	T.	.15	.50	T.	13	.	17	7.03			
Hennessey.	do.	T.	T.	T.	T.	.10	.15	T.	.1.75	.10	T.	.23	1.85	T.	2.12	.30	T.	10	.42	.	50	8.02		
Hobart.	Red.	T.	T.	.45	.10	.	T.	.41	.	T.	.12	.32	T.	.38	.03	T.	03	.73	.	3.79				
Holdenville |||	Canadian.	T.	T.	.50	T.	.97	.21	T.	.15	.	T.	.09	.	T.	.91	.	T.	.	27	T.	.13	.08	.	3.47								
Hooker.	do.	T.	T.	.24	.97	.21	.15	T.	.27	.	T.	.20	.	T.	.01	.	T.	.00	.	T.	3.66				
Hurley.	do.	T.	T.	.01	.	.	T.	.03	.	T.	.07	.	T.	.07	.	T.	.	.	T.	06	4.21				
Idabel.	Red.	T.	T.	.15	.	.	T.	.2.04	.58	T.	.02	.	T.	.31	.09	T.	.	.	T.	16	.	15	4.55		
Jefferson.	Arkansas.	T.	.11	T.	T.	.06	1.48	T.	.12	T.	.1.13	.	T.	.03	1.24	T.	.	T.	.07	T.	.	16	.	2.42								
Kenton.	Cimarron.	T.	.11	T.	.06	1.48	T.	.03	T.	.07	.18	T.	.1.13	.34	T.	.01	1.24	T.	.	T.	.70	.	25	7.36								
Kingfisher.	do.	T.	.02	2.85	T.	.03	.	T.	.04	.	T.	.08	.	T.	.1.03	.11	T.	.06	T.	.	.51	.	62	3.69								
McAlester.	Canadian.	T.	T.	T.	T.	.1.55	.	T.	T.	T.	T.	.25	.	T.	.1.90	.25	T.	.13	T.	.	.	4.58										
McComb.	do.	T.	.02	.14	.02	.1.66	.	T.	.02	.02	T.	.05	.	T.	.35	.	T.	.2.25	.65	T.	.	70	.	80	6.68							
Mangum |||	Red.	T.	.17	.	.	.	T.	.42	.10	T.	.01	.	T.	.09	1.03	T.	.20	.	T.	.37	.	T.	.	15	.02	03	5.66					
Marlow |||	Washita.	T.	T.	.11	T.	T.	.09	T.	.09	.	T.	.08	1.00	T.	1.70	1.00	T.	.02	T.	.	.88	.	15	.	13	5.03						
May.	Canadian.	T.	T.	.47	.	.	T.	.10	.58	T.	.02	.	T.	.25	.50	T.	.1.40	.	T.	15	.	2.87				
Meeker.	do.	T.	T.	.06	.1.64	.	T.	.01	.04	T.	.02	0.99	T.	.51	.28	T.	.	T.	.	T.	05	7.22				
Muskogee.	Arkansas.	T.	.58	.	.	.	T.	.80	.16	T.	.34	.	T.	.92	.	T.	.2.21	.18	T.	47	.	10	6.81			
Mutual.	Canadian.	T.	.01	T.	.2.00	.68	.04	T.	.06	T.	.80	.	T.	.1.21	.	T.	.	.	T.	33	.	64	4.85		
Neola.	Washtita.	T.	.29	.	.	.	T.	.43	.	T.	.66	1.02	T.	.10	.	T.	.	.	T.	01	.38	.	30	5.03	
Newkirk.	Arkansas.	T.	.08	.04	.	.	T.	.07	1.50	T.	.04	.05	T.	.96	.	T.	.10	.	T.	11	.	16	5.15		
Norman.	Canadian.	T.	.48	.	.	.	T.	.32	.1.40	T.	.01	.	T.	.09	.56	T.	.14	.87	T.	.04	T.	08	.	19	6.49
Oakwood.	do.	T.	.02	2.05	.72	.	T.	.09	.02	T.	.01	.	T.	.1.15	.98	T.	.25	.27	T.	.01	.	T.	04	.	10	5.30

TABLE 2.—*Daily precipitation for July, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 7—Continued.*

* Precipitation included in that of the next measurement.

[†] Separate dates of falls not recorded.
|| Precipitation for the 24 hours ending

Precipitation for the 24 hours ending on the morning when it is measured.
Precipitation is less than 0.01 inch rain or melted snow.

1. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations July, 1911. District No. 7, Lower Mississippi Valley.

Date.	Colorado.				New Mexico.				Texas.				Kansas.								Oklahoma.							
	Lamar.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris.		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore.		Bartlesville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	98	66	64	36	88	64	90	61	77	55	90	67	100	73	94	72	99	74	100	74	96	69	96	77	103	76	101	74
2....	95	62	59	39	77	61	88	62	77	56	87	65	101	73	93	69	100	72	103	76	96	67	96	75	102	71	104	74
3....	95	64	67	43	80	60	89	63	76	54	92	64	102	72	95	68	101	65	103	72	97	65	99	76	106	74	105	77
4....	98	67	70	38	90	60	92	62	81	55	93	66	101	74	98	70	104	72	105	74	98	64	101	78	108	76	109	75
5....	100	68	66	39	89	63	95	63	81	51	96	67	104	73	102	73	106	77	102	69	100	78	103	78	108	76	108	80
6....	89	64	64	42	77	60	99	64	74	57	94	69	95	72	92	71	95	72	99	68	94	69	93	74	102	72	101	72
7....	88	62	61	41	85	61	95	66	81	63	88	66	94	72	92	69	95	69	93	69	93	64	90	71	103	74	100	73
8....	97	65	64	37	90	60	91	69	84	50	93	66	83	70	94	71	98	71	93	71	97	69	91	71	91	72	97	73
9....	91	63	67	37	84	60	94	62	81	53	89	67	93	70	88	71	89	69	82	72	88	69	80	70	92	74	86	73
10....	99	63	74	38	93	63	92	62	84	55	85	66	96	71	94	66	95	68	94	72	96	66	90	69	100	71	94	73
11....	97	63	69	44	90	62	92	58	80	55	92	66	101	72	88	70	98	69	100	73	97	68	94	74	104	75	105	74
12....	93	64	71	42	86	66	93	61	82	59	83	66	96	74	87	65	91	69	90	74	86	65	92	71	95	77	82	72
13....	88	60	57	43	75	63	86	74	71	56	82	64	99	72	86	68	85	66	86	64	85	67	85	72	96	75	87	69
14....	83	63	72	41	80	60	76	64	71	56	79	64	94	72	90	63	93	57	92	67	89	62	91	69	92	74	92	70
15....	97	61	68	40	89	58	84	64	80	53	89	64	92	71	94	64	98	67	92	65	95	71	92	66	97	70	98	67
16....	92	59	70	38	88	58	81	65	74	57	84	64	93	72	92	60	93	57	87	63	92	59	89	61	95	71	89	67
17....	84	60	65	40	80	63	91	67	82	56	90	62	92	69	75	60	83	59	67	60	88	68	75	60	95	69	87	67
18....	97	63	66	42	89	58	94	61	82	51	85	62	90	69	82	60	88	54	85	58	91	61	86	59	91	65	92	62
19....	95	55	60	44	71	60	84	61	79	53	81	65	95	70	70	60	79	65	78	63	84	64	76	68	94	66	87	70
20....	87	64	71	38	80	63	86	73	76	56	83	65	96	74	79	67	84	67	82	70	80	65	82	70	95	74	85	70
21....	92	65	62	46	85	64	86	66	79	57	81	66	79	75	85	65	91	63	90	68	87	65	87	70	83	74	99	70
22....	98	68	58	42	93	62	92	64	84	57	94	65	88	72	84	68	89	67	90	68	88	67	92	73	93	72	92	72
23....	91	65	65	38	79	63	84	69	79	56	85	67	97	72	88	63	87	68	89	64	91	66	85	60	106	74	93	74
24....	80	58	65	41	70	59	85	67	63	51	69	55	82	73	76	55	79	51	78	57	81	54	76	58	78	68	75	59
25....	90	51	59	43	82	54	79	55	73	51	77	54	88	60	80	58	82	48	83	52	81	51	83	59	89	58	82	54
Mns..	93.7	62.3	65.4	40.0	84.5	60.7	89.0	63.5	78.5	53.9	86.2	64.5	93.2	70.2	88.0	65.7	91.9	65.1	88.7	67.1	91.2	64.4	87.4	68.8	95.4	71.3	91.6	69.1

Date.	Oklahoma.				Missouri.				Kentucky.				Tennessee.															
	Enid.		McAlester.		Mangum.		Muskogee.		Oklahoma.		Weatherford.		Woodward.		Caruthersville.		Ironton.		Lamar.		Olden.		Springfield.		Lynnville.		Jackson.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	104	74	102	75	98	72	104	75	99	75	101	74	97	73	94	68	96	61	100	73	94	69	93	73	-	-	93	65
2....	105	69	103	78	97	72	105	74	97	73	101	76	97	70	96	67	98	63	102	74	96	67	95	74	-	-	97	66
3....	106	72	104	75	101	72	105	75	99	77	104	76	100	68	97	69	100	66	104	75	94	71	98	76	-	-	101	65
4....	107	74	104	76	103	70	106	86	101	77	108	73	102	74	99	73	101	66	104	76	96	71	96	74	-	-	102	70
5....	108	80	107	75	103	70	107	75	103	76	106	77	105	75	92	69	100	71	105	76	96	71	98	73	-	-	95	69
6....	107	76	104	73	107	74	103	73	99	70	104	75	100	74	88	69	90	67	96	73	93	68	88	68	-	-	93	69
7....	95	69	102	72	94	72	97	72	92	70	91	69	94	68	89	69	93	63	94	69	87	64	88	68	-	-	89	68
8....	83	69	93	71	94	70	96	72	89	71	91	69	94	70	90	66	92	66	96	71	89	67	90	69	-	-	92	69
9....	88	73	95	69	92	72	91	71	78	68	89	71	92	72	92	69	94	70	85	73	91	67	87	68	-	-	90	70
10....	95	71	101	75	94	71	96	73	88	72	93	71	93	65	97	70	91	72	89	70	89	73	84	69	-	-	92	69
11....	102	73	104	80	101	70	101	73	96	75	101	73	102	73	90	73	94	71	97	68	94	68	94	73	-	-	95	70
12....	88	70	102	75	103	70	99	77	86	72	87	74	88	68	99	73	96	64	84	79	92	71	86	69	-	-	94	70
13....	85	68	101	72	84	72	98	72	87	71	83	71	88	70	94	74	91	68	88	70	88	71	86	68	-	-	97	69
14....	91	67	98	71	92	70	98	70	93	70	90	69	93	65	95	72	95	62	91	70	88	66	88	71	-	-	93	68
15....	96	70	100	70	93	70	98	72	92	73	90	6																

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TABLE 3.—Maximum and minimum temperatures at selected stations, July, 1911. District No. 7—Continued.

Date.	Tennessee.				Arkansas.												Mississippi.						Clarksville.		Corinth.		Greenville.	
	Kenton.		Memphis.		Bentonville.		Corning.		Dardanelle.		El Dorado.		Fort Smith.		Little Rock.		Pine Bluff.		Texarkana.		Wynne.		Clarksville.		Corinth.		Greenville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	95	68	94	75	96	69	94	70	99	71	97	72	99	75	95	76	97	71	97	75	98	70	96	71	96	70	96	71
2.....	98	67	94	76	97	68	95	70	101	72	96	74	100	75	97	76	98	72	98	73	99	70	98	71	98	68	98	74
3.....	99	71	97	78	98	71	97	70	101	70	97	74	100	76	97	76	100	74	99	75	99	70	98	73	98	71	98	75
4.....	102	73	94	76	98	71	99	72	102	72	97	73	102	78	97	77	99	74	99	76	100	72	95	71	98	74	97	71
5.....	93	69	88	73	100	70	98	72	98	71	92	73	101	76	86	73	87	77	97	75	89	73	90	70	90	73	90	74
6.....	89	70	86	69	93	68	88	70	88	70	86	72	90	72	85	71	89	70	90	72	87	70	87	69	87	68	86	71
7.....	91	67	86	89	67	57	68	89	71	86	72	90	73	82	72	87	70	87	72	85	70	81	72	86	70	87	72	
8.....	93	70	87	71	91	67	89	73	91	73	88	71	91	73	79	72	88	70	88	72	83	73	86	68	91	72		
9.....	92	71	86	70	90	69	90	69	94	69	90	70	94	71	87	71	87	69	92	70	86	69	90	68	88	70	93	68
10.....	96	71	89	76	87	71	90	72	96	70	94	73	95	74	89	72	90	69	94	72	93	72	90	73	85	72	95	73
11.....	91	72	82	75	96	71	80	70	93	73	95	72	100	76	89	75	94	74	95	75	87	75	90	71	90	70	94	74
12.....	97	72	88	74	90	72	91	70	91	70	94	72	96	75	89	74	93	72	94	72	80	73	91	74	90	70	94	74
13.....	99	70	90	73	92	69	91	72	94	72	89	71	93	73	89	72	90	71	90	71	92	72	91	73	94	69	90	72
14.....	94	68	90	74	84	67	90	68	90	71	84	73	90	72	85	73	90	72	87	73	86	72	88	71	91	68	89	72
15.....	96	67	92	74	90	63	91	66	95	66	87	72	93	71	89	73	90	70	90	71	86	72	93	70	92	73		
16.....	82	66	78	72	85	66	87	67	91	69	85	72	89	69	87	69	84	70	82	71	81	70	82	71	85	70	84	70
17.....	85	59	85	66	87	63	83	60	90	63	85	67	87	70	84	66	88	66	86	69	84	66	86	69	84	66	89	70
18.....	65	87	69	85	62	86	66	89	61	90	65	88	69	83	66	84	65	81	72	86	66	86	64	83	66	84	66	
19.....	89	84	68	88	64	85	64	94	65	90	63	93	69	86	70	99	69	82	70	90	63	88	71	87	62	91	67	
20.....	80	70	82	72	81	69	82	72	88	71	89	72	88	71	86	74	89	75	92	73	88	72	90	71	82	70	89	71
Mns..	89.6	66.9	85.6	71.4	87.2	66.1	87.5	67.5	90.5	68.2	88.3	69.9	90.2	71.0	86.2	70.9	89.1	69.6	89.8	71.2	86.8	68.7	87.7	67.5	89.6	70.2		
Date.	Mississippi.				Louisiana.												Shreveport.						Robeline.		Schriever.		Shreveport.	
	Kosciusko.		Natchez.		Vicksburg.		Alexandria.		Baton Rouge.		Covington.		Lafayette.		Lake Charles.		Monroe.		New Orleans.		Robeline.		Schriever.		Shreveport.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	94	70	94	71	92	75	95	69	90	72	93	69	89	74	98	69	98	75	90	76	99	68	94	72	97	74		
2.....	97	72	93	70	92	75	94	70	94	72	93	70	90	73	94	71	97	73	91	74	95	70	95	73	98	76		
3.....	97	74	94	71	90	74	94	70	94	74	93	73	92	75	95	70	95	70	88	76	100	69	93	69	98	73		
4.....	93	68	93	73	92	71	95	70	94	72	91	69	89	73	92	68	97	74	89	74	94	76	89	71	96	76		
5.....	89	72	86	70	89	71	90	72	90	73	80	72	78	75	89	72	95	70	79	70	92	72	76	72	95	72		
6.....	82	70	75	70	77	71	80	70	88	70	76	71	80	72	88	68	89	70	78	72	85	70	76	71	80	72		
7.....	80	68	76	68	78	70	80	70	85	68	82	72	80	70	81	66	83	71	77	71	84	71	83	71	85	71		
8.....	89	67	87	70	87	70	84	70	89	69	89	70	89	70	85	69	86	71	88	71	90	71	88	71	85	71		
9.....	92	69	91	70	91	69	90	71	91	70	90	72	90	70	93	67	93	75	89	75	93	72	93	68	93	71		
10.....	93	70	92	70	92	73	93	72	92	72	91	71	91	72	95	70	94	76	89	75	95	69	92	69	93	70		
11.....	94	72	80	72	90	72	90	71	91	73	85	74	91	68	94	73	89	75	94	70	93	71	95	74				
12.....	84	72	91	71	87	72	93	72	87	73	90	75	85	73	88	69	93	75	86	73	94	71	91	73	92	72		
13.....	91	71	84	73	87	72	88	72	88	73	91	72	84	73	88	70	93	73	90	74	87	72	92	72	94	74		
14.....	85	71	86	72	81	72	89	71	90	73	92	72	88	73	90	68	93	75	88	73	92	71	93	72	94	72		
15.....	80	72	82	73	82	72	83	71	89	74	85	74	81	74	84	72	85	74	86	73	88	72	90	74	93	72		
16.....	85	69	85	70	82	72	83	69	97	71	89	71	85	73	88	69	86	71	84	73	88	72	85	71	85	71		
17.....	87	70	78	71	87	72	88	69	87	73	86	76	83	74	88	68	86	71	88	72	88	71	90	71	89	70		
18.....	82	64	75	72	64	75	70	75	70	77	70	75	73	75	85	68	81	72	86	70	86	67	86	69	77			
19.....	89	66	87	71	85	70	88	69	90	68	85	70	86	71	91	79	91	68	86	74	89	70	91	70	76			
20.....	90	70	90	71	88	73	93	71	92	70	90	70	90	72	91	71	92	73	89	74	94	72	90	70	91	75		
21.....	89	72	88	75	83	76	95	73	93	71	92	72	90	76	92	72	97	73	92	76	90	74	93	73	95	77		
22.....	83	73	86	76	84	77	86	74	92	73	85	74	87	71	97	73	90	77	88	76	92	72	92	72	90	77		
23.....	88	71	89	74	87	76	90	74	90	76	92	73	90	77	90	74	90	76	86	74	91	73	93	76				
24.....	86	75	84	75	86	72	90	73	95	77	95	76	92	77	96	70	85	75	92	77	93	75	95	74	80			
25.....	8																											